



Penmoelallt... a woodland lost in time.

Way Station 2

www.merthyrnats.org.uk

GPS location: N 51°46.29

W 003°25.42

O.S. Co-ordinates: SO 018 090



FOSSILS

Be A Palaeontologist!

Be a palaeontologist! Do you have what it takes to find fossils around Penmoelallt? See the back of this leaflet for information on the fossils that you might find.

What to do when you find a fossil!

What do we do with the fossils we find?

If we dug up all the fossils around Penmoelallt there would be none left to find and we would need some serious equipment!

So take rubbings of the fossils you find around Penmoelallt. Grab some tracing paper and get searching! See if you can find all 4 of the main fossil types around Penmoelallt and possibly others that haven't been found yet!

Just for Fun: Spot The Odd One Out:

Look at the two sets of four fossils, which ones aren't meant to be there?



Thank you to all our dedicated volunteers, without whose help, the Penmoelallt Woodland Project would not have been possible.

Fossils: some information

What is a Fossil?

When most people think of fossils they think of dinosaur skeletons and large bones, but there are many different types of fossils to be found. Fossils are the remains of once living animals or plants. The study of fossils is called "palaeontology".

What can Fossils tell us?

Fossils give us information about how animals and plants lived in the past. By studying fossils we can tell how old they are, how different plants and animals are related to each other and even for how long life has existed on Earth. Often we can work out how and where they lived, and use this information to find out about ancient environments.

Identifying Fossils:

Some fossils are easy to identify and look like plants and animals alive today. While we can easily recognise and identify some fossils, many fossils represent animals that no longer exist on Earth. We only know about extinct groups like dinosaurs, ammonites and trilobites by looking at fossils.



Brachiopods - Brachiopods are large shell like fossils. They have lines across their surface and look similar to shells you can find on the beach today. There is a good chance you may spot one of these at Penmoelallt today!

Corals - Corals are made up of small invertebrate animals, that look like tiny sea anemones. They grow together and can cover huge areas, some coral reefs are even big enough to be seen from space! Corals are great for looking at what an areas climate was like millions of years ago. These are also around Penmoelallt so keep your eyes peeled and you might find some!



Gastropods - Gastropod fossils are shells of animals that lived many years ago. The shells look like swirls, they are coiled around themselves. You probably know one gastropod already, *the garden snail!* The common garden snail also has a swirl like shell, but gastropod fossils are harder to find than a snail. These will be harder to find in Penmoelallt than some of the other fossils. The gastropods at Penmoelallt are probably fossils of sea snails from millions of years ago!

Crinoids - Crinoids are sea animals, they have a stem and then lots of arms on the end of their stem that are used for feeding. They are sometimes known as "sea lilies" or "feather stars". These, like gastropods, at Penmoelallt are rare, so have a good look and see if you can find one!

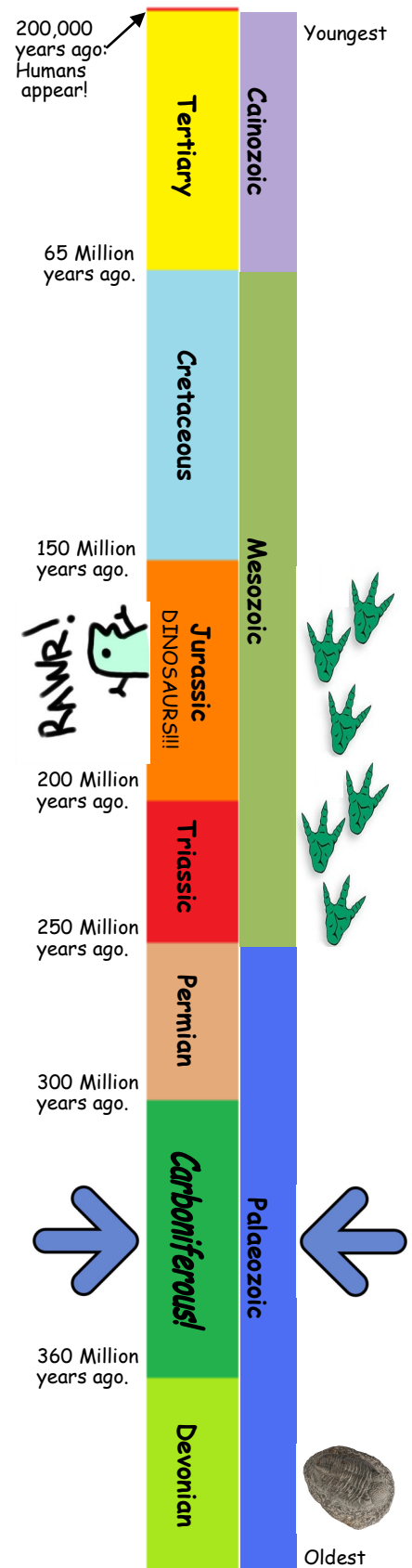


Why does Penmoelallt have Fossils?

Here at Penmoelallt we have "Carboniferous Limestone" which is perfect for fossils! This limestone was formed by sediment (like sand or mud). What's really amazing about carboniferous limestone is that its formed at the bottom of tropical oceans! So the fossils you find today, and the rocks you're standing on now used to be at the bottom of tropical waters (like the Bahamas)!

The Carboniferous Limestone you see today is between 300 million and 360 million years old! The dry stone wall around our outdoor classroom is made from these rocks. Can you see any fossils in the dry stone wall?

If you can't find a real fossil, look at the sides of the Stone Table in the Outdoor Classroom!



Remember to keep the Countryside Code!

- Be Safe - plan ahead and follow any signs.
- Leave gates & property as you find them.
- Leave machinery and livestock alone.
- Protect plants & animals and take your litter home.
- Keep dogs under close control.

You want to know more?

Visit these websites:

- www.oum.ox.ac.uk/thezone/fossils
- <http://en.wikipedia.org/wiki/fossils>
- www.discoveringfossils.co.uk/